# Foreign-Born and Native-Born Migration in the United States: Evidence from IRS Administrative and Census Survey Records

Thomas B. Foster, *U.S. Census Bureau* Mark J. Ellis, *University of Washington* Lee Fiorio, *University of Washington* 

Population Association of America April 26, 2018



#### Motivation

- Migration data
  - Distance between data and research questions
  - Using survey data, alone (Conway and Rork 2016; Franklin and Plane 2006; Raymer and Rogers 2007; Rogers, Jones, and Ma 2008)
  - Indirect responses to migration questions (Kaplan and Schulhofer-Wohl 2012)
- Measure migration using administrative records from the Internal Revenue Service (IRS)
  - Migration estimates to complement surveys
  - Small populations and geographies
  - Detailed earnings reports



#### Data Sources and Record Linkage

- Administrative Records
  - IRS 1040s (2000-2015)
  - IRS 1099s (2003-2015)
  - IRS W2s (2005-2015)
  - Social Security Administration (SSA) "Numident"
- Census Bureau Microdata
  - 2010 Census
  - 1-Year American Community Survey, 2010 through 2013
- Unique, Anonymous Person Identifiers
  - Person Validation System (PVS) assignment (Wagner and Layne 2014)



#### Migration and IRS Administrative Records

#### Advantages

- Near population level coverage
- Incentives to report accurately
- Reference approximately the same time each year
- Measure migration by changes in addresses from year to year
- Precedent for use of Form 1040
  - Census Bureau's Population Estimates Program
  - IRS's Statistics of Income website (https://www.irs.gov/statistics/soi-tax-stats-migration-data)



#### Migration and IRS Administrative Records

- Potential for selection and survival bias
  - Not all Americans file tax returns
  - Bias may compound in migration measures
- Combined, IRS 1040s, 1099s, and W2s are representative of 2010 Census population
  - Cover 95% of native-born and 92% of foreign-born
- Survival rates are high
  - 88% of native-born and 86% of foreign-born survive from 2000 to 2015
  - Discernible sociodemographic patterns in survival



## How do migration measures derived from IRS records stack up against comparable measures in the ACS?

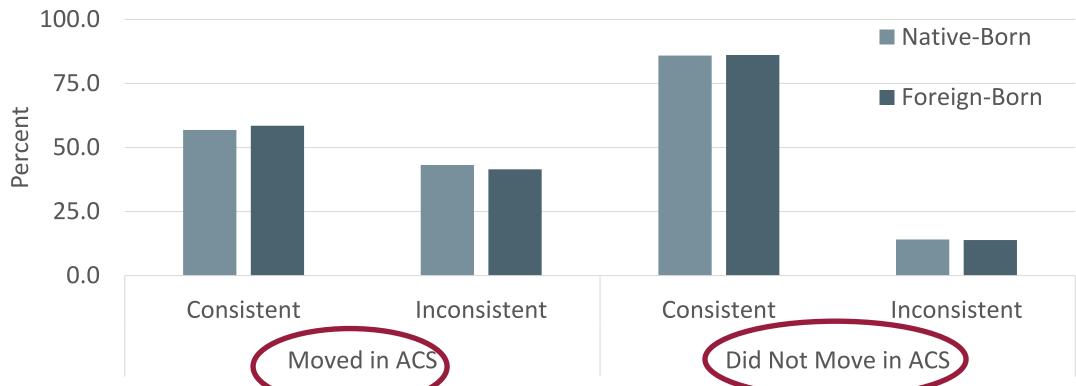


#### Comparing Individual IRS and ACS Inter-Address Migration Measures

- Migration in IRS measured as address change between successive tax years
- Migration in ACS measured as response to the question, "Did you live in the same house one year ago?"
- Match individual responses by unique person ID and timing of observed migration interval
  - Over 97 percent of native-born and 95 percent of foreign-born ACS respondents are found in the IRS 1040s or 1099s
  - 43 percent of native-born and 46 percent of foreign-born individual ACS respondents can be matched to an IRS record such that migration intervals overlap by at least 10 months

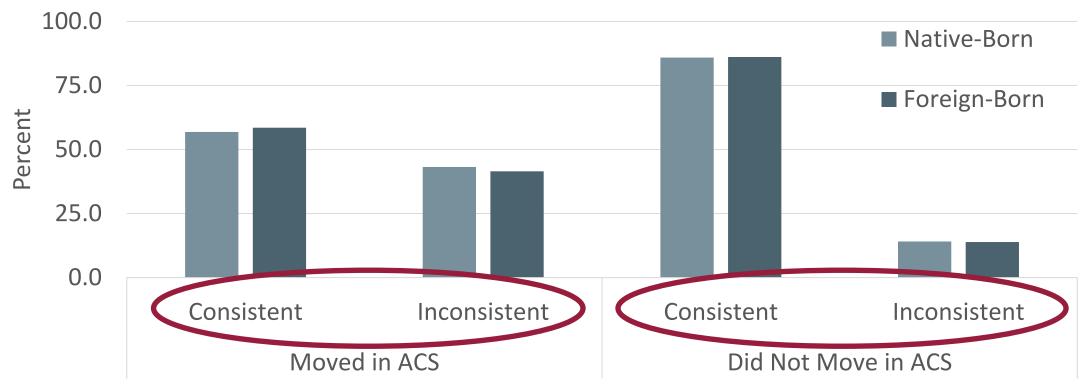


#### Comparing Individual IRS and ACS Inter-Address Migration Measures, 2010 through 2013



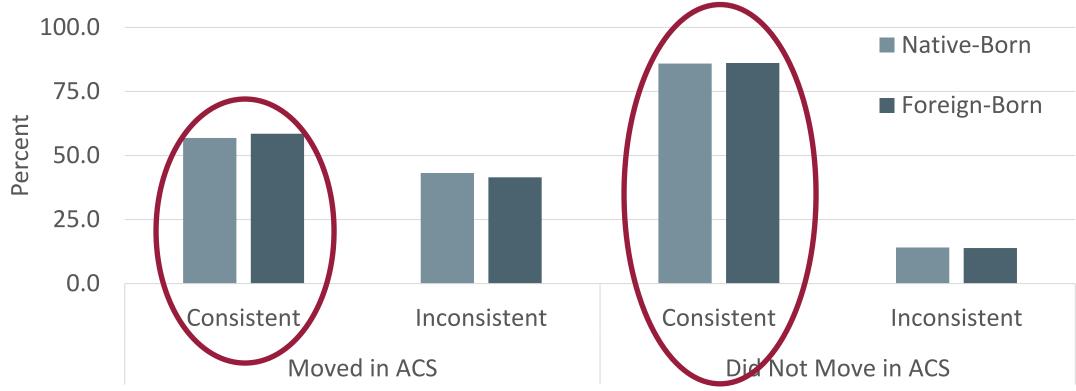


#### Comparing Individual IRS and ACS Inter-Address Migration Measures, 2010 through 2013

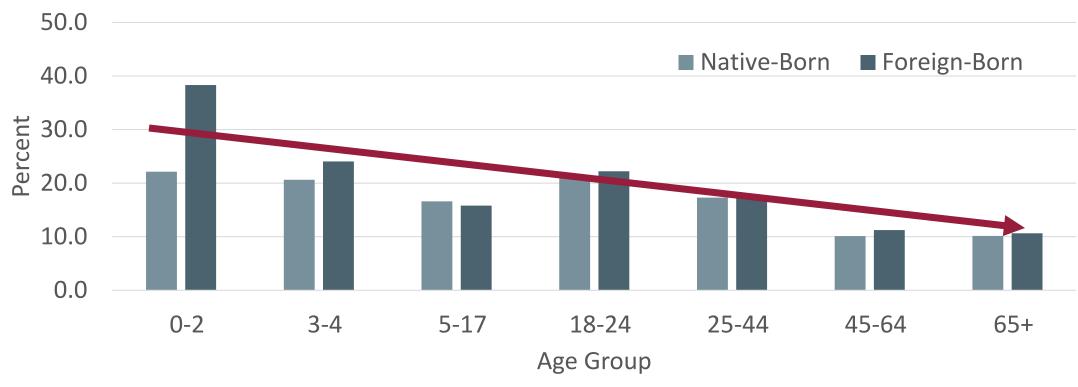




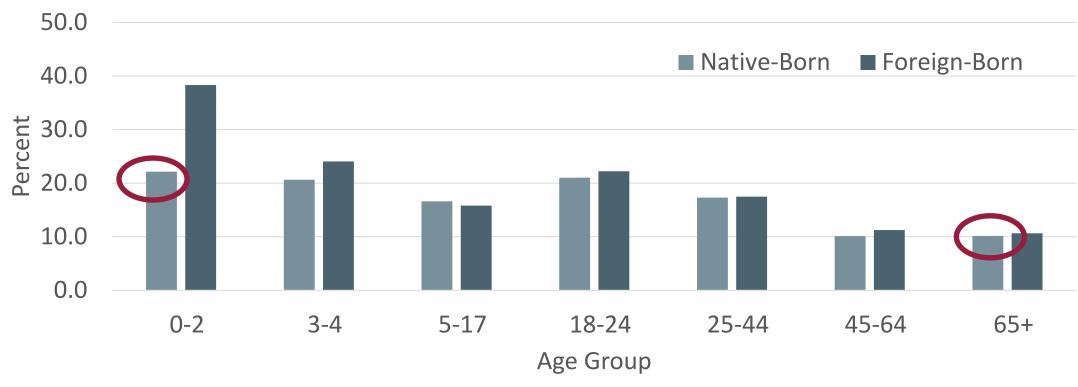
#### The vast majority of IRS and ACS migration measures are consistent with one another



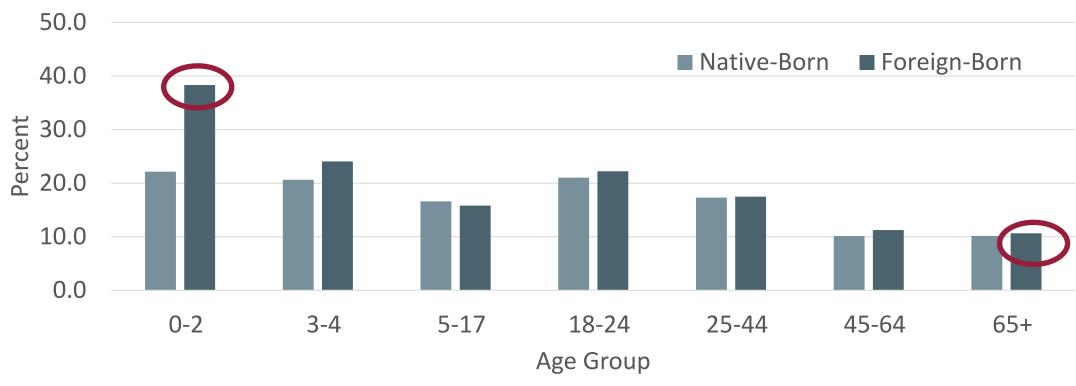




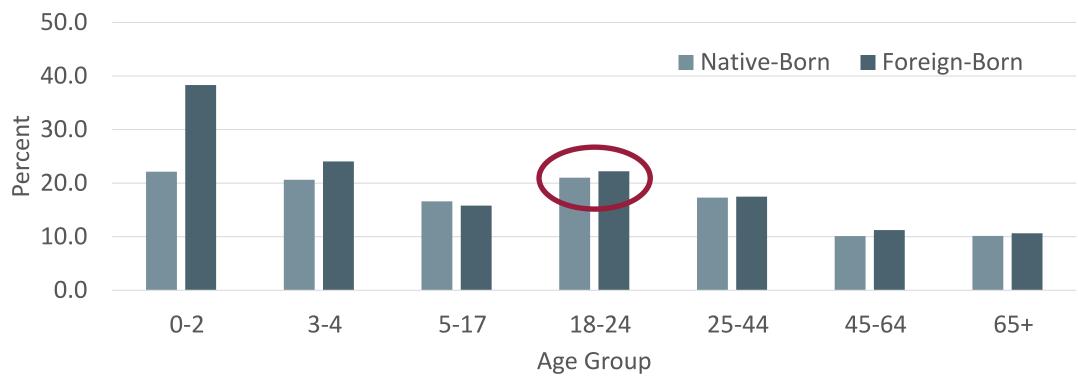




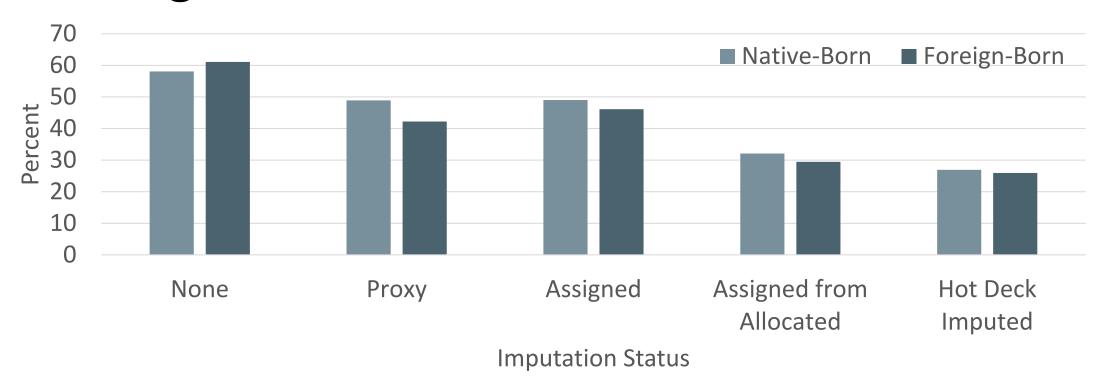




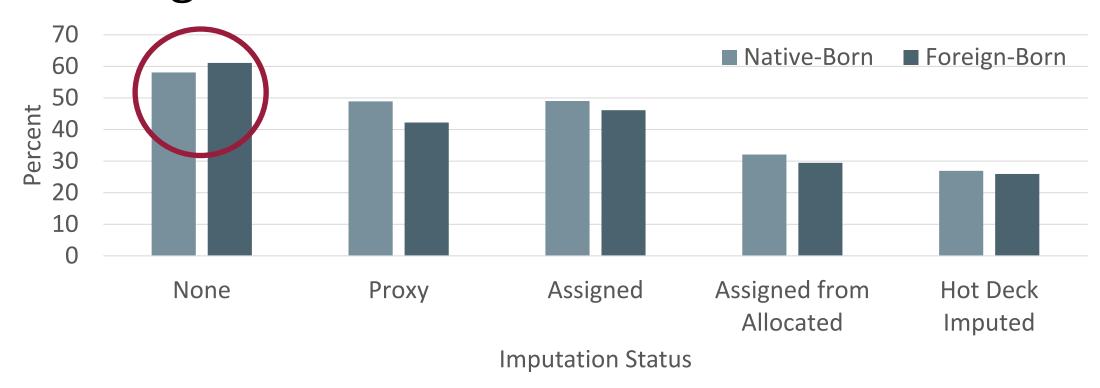








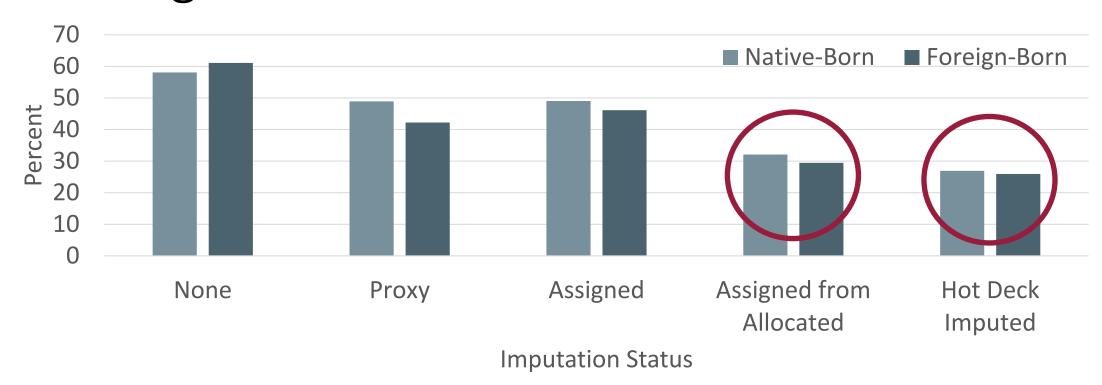














#### Opportunities for Future Research

- Migration data on hard-to-reach populations
- Fine-grained levels of geographic detail
  - Neighborhood mobility and change
  - Segregation
- Links between geographic and socioeconomic mobility
  - Longitudinal data at near population levels
  - Effects of native-born and foreign-born domestic migration on outcomes

#### Thank You!

Questions?

Thomas B. Foster

(thomas.b.foster@census.gov)

Mark Ellis

(ellism@uw.edu)

Lee Fiorio

(fiorio@uw.edu)

